/78 cont./

412 kneeling woman exerts on them is accompanied by gentle rocking, which facilitates the grinding.

372 /79/ The Uro have no combustible material other than dried
[232] animal excrement and tola branches, which they go far to seek.
[224] These things are precious, and the Uro, like the Čipaya and the Aymara, are sparing in their use.

231 Near the huts a type of earth niche is sometimes erected which is rather similar to the huts around the village of Chipaya; these are pigstys.

226 Fishing. The Uro, in our age as in pre-Colombian times,
[212] draw their main subsistence from the lake. They are excellent
[439] fishers. The fish they catch is partly consumed by themselves and partly sold to the Aymara and to the half-breeds of the capital. I did not have the opportunity to be present on a real fishing expedition, only at several demonstrations made at my request. They first taught me the way in which they use the landing net shown in Fig. 23, 1 /see p. 9/. The wooden frame which holds the stretched-out net is fastened to the end of a pole. The Indian plunges this rectangular pocket into the water and remains standing or seated on his balsa until he sees an interesting prey. He begins by lifting his net delicately, then pulls it out of the water with a sudden motion.

227 There is another type of landing net which is much larger. It is composed of a circle from which wooden sticks joined at one end go out. This skeleton, conical in form, is covered with a net. Another net, as large as a hand, is stretched across the opening to make the escape of the fish even more difficult. This apparatus is often of considerable dimensions; some are more than three meters in diameter. They are always equipped with a handle by which they are held in the water and lifted up as soon as the fish have ventured in (Pl. III, B /see p. 23/).

The Uro Indians also possess bottom nets, which I regret not having seen employed. I have, however, acquired a perforated stone (Fig. 24, 2 /see p. 10/) which corresponds to our weights or ballast.

/84 cont./

396 the Uro are obliged to keep up with an incessant demand. They have veritable maritime shipyards on the steep bank of the Desaguadero, where constant activity reigns (Pl. IV, A /see p. 24/).

396 423 424 Each family owns a portion of the bank, whose limits are marked by small walls. Within these enclosures they heap the totora from which the balsas are made. This plant (Cyperaceae, of the genus Scirpus) (Scirpus totora, Kunth.) forms actual fields in the swamps which line the Titicaca. The Indians come to cut it as they need it. "Every family that owns a field near the shore considers itself the owner of a certain expanse of these totorales. It is the only family to exploit this area, and its rights are respected by the neighbors (1)."

[113]

1. Parodi (Lorenzo R.), "Las balsas usadas por los aymaras en el lago Titicaca /The Balsas Used by the Aymaras on Lake Titicaca/," Physis, Revista de la Sociedad argentina de ciencias naturales, Vol. XI (Buenos Aires, 1932), pp. 145-149.

396 424 It is a picturesque spectacle to see the Indians who went in search of totora return; the cut stalks have been tied together into huge bundles which are allowed to float like a train of wood after being secured to the rear of the balsa (Pl. III, A /see p. 23/).

The totora can be used only when it is dry. Hence, after having gathered it the Indians' first concern is to spread it out in their enclosures. They also make faggots out of it by standing the stalks upright to expose them to the wind and sun. It is only when it has lost all dampness that the totora can be used to construct balsas. Its thickness is thereby diminished, its immediate rotting prevented, and, above all, the possibility that the bundles which constitute the balsa might disintegrate because of a loss in volume is avoided.

/84 cont./

396 The construction of these rafts is rather simple, although
[147] it demands great manual skill and considerable expenditure of strength. The keel is composed of two enormous spindle-shaped sheafs of totora tied together. The natives obtain them by heaping up and intertwining stalks of totora of unequal length (Pl. IV, B /see p. 24/); they take care that the shortest remain inside and they cover these with progressively longer stalks until the total forms a compact mass. The rope which maintains each of these rolls /85/ /Fig. 25 appears here/ /86/ is crossed at each turn with that of the other sheaf. Two padded rims are then fastened to the edge, where they serve as a railing and add to the stability of the craft. The only instrument to which the Indians have recourse in making these rafts is a wooden hook (Fig. 24, 5 /see p. 10/), which they use to lift the straw rope, either to tighten it or to pass the rope which joins one sheaf to the other under it. This alternating play of the ropes obliges the balsa constructors to work always two by
501 two (Pl. IV, C /see p. 24/). For navigating, the Uro have long boathooks, l'okena, the wood for which comes from the eastern slopes of the Andes. The extremity of these poles ends in a sort of trident which prevents them from sinking too deeply in the mud of the lake (Fig. 25, 2 /see p. 15/).

285 Mats. The Uro Indians have several uses for the rush (totora) mats. They make the framework and roofs of their huts from it, their beds, the door of their house, and the sails of their balsas. Making them is not complicated. The totora stalks are spread out on five or six parallel ropes, stretched between stakes, and attached to them in little piles.

283 Rope-making. The Uro are obliged to constantly make rope, the indispensable accessory for the two industries which have just been mentioned. Different types of gramineous plants,
[124] among them the Stipa ichu Kunth, Festucha orthophylla Pilger, and F. dissiflora Griseb (1), furnish them with raw material of

1. Parodi, p. 4.

[text continues on p. 16]

/117 cont./

199 had to manifest itself through the intermediary of Aymara. The Uro dialect of the Čipaya is thus an ailing language in the process of disappearing in the future that I believe to have saved from oblivion, if not in its entirety, at least to a great extent.

133 137 The territory. The physical environment is that of the puna (Pl. VI, A /see p. 30 /) artificially altered by man. If one arrives in Chipaya coming from the north, one traverses for almost a day an uninterrupted succession of sand dunes, to which some tufts of long, hard gramineous plants (ičú, Stipa ichu (Jarava) or the black, twisted stalks of tolas (Baccharis Lepidophyllum and other Compositae) cling. Once the dune area has been crossed the terrain becomes completely flat, and the rarer tolares alternate with the mossy swellings of yareta (Azorella). In places the vegetation disappears completely, but the most sterile parts are adorned with some Alpine flowers, which make imperceptible spots of color against the greyness of the ground. The Indians are [301] not disdainful of them. I remember having seen them gather [824] bunches of them during a festival to stick in their hair or to decorate [134] the images of saints. The aridity of this sandy soil manifests itself with an intensity which becomes more and more acute the closer one comes to Chipaya territory. The boundary is marked by the complete disappearance of the plants mentioned above and by the appearance of stunted grass, thinly sown, which hardly [311] reaches a few centimeters in height. These wretched pastures are 312 the product of human industry. The Čipaya obtain them thanks to a system of irrigation that would do honor to their spirit of enterprise were it not the necessary condition of their existence in this environment. Using canals, some of which are almost two meters deep and three meters across, they have diverted a part of the waters of the Lauca River and conducted it by secondary branches across the entire extent of their territory. During the rainy season and the period of great floods, they provoke inundations by raising a few dams here and there. The water fertilizes the sands of the

/343 cont./

*796 677 them devotedly when the sacristan gave them to them. The latter also distributed the small baked clay dishes which had contained the offering of tallow for the illumination of the church to all those who had come.

As if on signal all left the church, the functionaries leading. The two new alcaldes and their wives squatted down in the courtyard before the church, where the Indians came in turn to embrace them or to kiss their hands while bowing low.

692 The Corregidor, who took office the same day, placed himself at the door of his house behind a table on which he had placed the Bolivian civil code of 1831 beside a bouquet of pinks, two silver drinking cups, and a bottle of eau-de-vie. One after the 692 506 other all the members of the tribe without differentiation by sex came to do homage to him.

They began by bringing the hand to the mouth, then, bending their knees, lightly touching either the book of the edge of the table with a timid gesture. Still keeping their suppliant and frightened mien, they stretched their arms toward the Corregidor and toward his wife as if to throw themselves at their knees. They [273] next offered them alcohol in two twin drinking cups. /344/ The Corregidor returned the politeness and never consented to reach into the pouch of coca which was offered him without having his accepted in exchange.

An old woman who came late and could not find the Corregidor went to pay her respects to the stick of authority which the latter had left in his hut.

627 535 [292] Meanwhile the Indians were joyfully dancing, led by the outgoing alcalde who was bizarrely accoutred for the occasion. He had knotted a white and black sling around his body, from which hung skeins of little strings which covered him to the knees. He [301] had stuck flowers in his hat and tied on two large iris leaves, sold [824] at a high price by some passing Aymara, at the level of his forehead. [939] Brandishing his white banner, he led the troup of musicians and

/352 cont./

*796 The saints and mal'ku were requested with more insistence to grant the Čipaya a good year, without dry spells or frost, in the course of which the flocks would multiply. At a given moment [824] [301] all left to gather little mountain flowers with which the men decorated their hats and the women their braids. They also spread bouquets on the small tablecloths covered with coca. "The flowers bring luck," they replied to the question I put to them on this subject.

Shortly before sunset all those present knelt in a line before the chapel, whereupon the Officiant took the box containing Santiago /James/ and put it on the head of each of the faithful. He left it there during an entire prayer, doing the same for all, and did not proceed to the next person until the hoofs of Santiago's horse had been respectfully kissed. On the way back they stopped in front of every chapel as before to kneel, this time to the east. Several times I noted that before getting up again, the men, and more especially the women, touched the ground with the hand and then brought it to the mouth.

Espíritu Mamani put a pinch of copal or incense on the east side of the niche with which each oratory is provided.

When the group arrived at the village it headed first toward the chapel of the saya tuanta and on their knees went around the cross placed near the threshold. They then reached the church, where they performed the same ceremony, accompanied with prayers and chants. The Officiant, who had armed himself with censers, put them under the noses of the faithful as if to make them inhale the fragrant smoke which was released from it.

[209] On the next day the saya was awakened by the beating of a drum as on the day before. All the inhabitants hastened to reach the surroundings of the alferez' house to take part in the feast that [214] the latter, aided by his relatives, had prepared. The women ate squatting in front of blankets on which various types of hash had been spread out. The men carried off their rations in the flaps of their poncho or their cape. When the feast was finished the

/356 cont./

*778 *796 Offerings of coca, pinches of which were sown in the wind in the direction of the four cardinal points, followed the libations (č'al'a). /Fig. 35 appears here/

The alferez' wife then arose and went to attach tufts of red and yellow wool around each samiri. Then kneeling in front of the Officiant and his assistant, she and her husband made a pretense of clasping them in their arms in order to thank them for their work.

During the entire ceremony two censers (Fig. 35, C /see p. 78/) had been kept lit in front of the /357/ samiri; the alferez and his wife took hold of them to go render homage to the Officiant. This same gesture was repeated by all the new arrivals who were beginning to come in great numbers. Each Indian upon arriving at the ceremonial area began by taking one of the censers, the flame of which he re-animated by blowing on it and adding a few pinches of incense. Then, getting down on his knees, he covered several meters toward the east in this position. He then put down his censer, recited a prayer, and then dragged himself to the samiri to fumigate them. Finally, without getting up he went to greet the alferez and the alfereza with the gestures previously described.

*778 *796 824 While the Officiant was ending the first part of the ceremony, the alferez and his wife had begun to lay out the straw that they had brought in sheafs. Each sheaf was tied with festive slings and on the front new sacks of coca in gaudy colors and decorated with glass beads were attached. A few quinua plants had been mingled with the stalks of straw. The alferez and his wife stood these bunches of straw upright by squashing the roots in front of the place from where they presided over the ceremony (Pl. XIII, A /see p. 134/).

The new arrivals brought other sheaves of straw with them as gifts, some of which, tied with festive slings, were in addition decorated with garlands made of ring-shaped bread (pil'u), a shape which I saw among the Čipaya only during festivals. In the sheaf delivered by the alcalde his stick of authority was planted. The

[Text continues on p. 79]

/357 cont./

*1778 *1796 824 alferez and his wife received in addition cheeses, eggs, and even some small silver coins which they placed in front of the sheaves along with two horns and some flutes. They then proceeded to the distribution of part of the straw, which the women passed between the twists of the braids on their temples. The men decorated their hats with it.

In the samiri's cellar (Fig. 35, A /see p. 78/) the Officiant placed four small bags of white paper tied with strings of red wool, which contained respectively the following items: in the first, lozenges and white, yellow, and pink candy destined for the Earth-mother to make her sweeter; in the second, cloves, pimento, cinnamon bark, pallios (a type of cinnamon), and maté leaves; in the third, olives, orange peel, Carob-tree pods (kˣoka), dried pieces of peach, guava, quince, and apple; and in the fourth, dark red, clear blue, and brown mineral powders (sevarios), each in a separate little paper bag, rosemary, starch, and lastly two white and pink candies. Next to the little bags he then placed two small plants stuck into a pellet of fat and a bunch of pinks.

*1778 *1796 On the other hand he then took out a bottle which had /358/ been in the cellar, into which those present one by one came to pour the contents of a drinking cup of alcohol. At the same time as this offering they sprinkled several drops of alcohol on the samiri and pinches of coca into the cellar. This libation was ceaselessly [539] [231] accompanied with this prayer muttered in a low voice:

Haˇča	pakˣal'a	samiri	kulumayo	pakˣal'a	samiri	kon
Large	livestock	"	pigs	livestock	"	with

usita	pakˣal'a	samiri	maitarapita.
sheep	livestock	"	give to me.

"Samiri of the large livestock (llamas), samiri of the pigs, samiri of the sheep, give to me."

/363 cont./

*798 *796 504 [262] this time with two soups, one of quinua and the other of ẍuño and quinua leaves. They were distributed in small individual bowls which, as soon as they were filled by the efforts of the alferez' wife and several other women, were carried to the guests by a group of little boys. Inside the hut the alferez was standing behind a table on which the heads of the sacrificed animals and the sheaves which had been used the day before were placed. As usual, the alferez' wife was in her place, to the left of her husband. The most respected guests were seated inside the hut.

[239] [824]

[554] The meal did not last long. When the last guests were on the point of leaving, the flag was rolled up and carried away by an individual, undoubtedly the person who the day before had been proclaimed katokere, i.e., alferez of the next festival.

/364/ Several hours later a large group formed again in *798 *799 [273] the alferez' hut, this time occupied in drinking according to the usual ritual. Two old men uttered prayers to the mal'ku without pause, even while drinking. At a given moment they knelt in the middle of the hut, their bodies turned toward the east, and, in this position, addressed a long invocation to them, which they concluded by kissing the ground.

*798 *796 539

Kant-mal'ku,	Kusil'er-mal'ku,	Kilimint-mal'ku,	Kusil'aviri,
Kant-demon,	Kusil'er-demon,	Kilimint-demon,	Kusil'aviri,

márka-kol'o,	Kemperan	mal'ku,	Estewan-mal'ku(1).
country mountains	Kemperan	demon,	Stephen-demon,

1. During the feast of the Estewan-mal'ku, the alferez threw beans, peas, and dried fruit to the winds.

/373 cont./

The prayer which recurred most often on the Officiant's lips clearly indicated that the Estewan-mal'ku alone was to receive the honors apparently being paid to his colleague:

Estewan-mal'ku	hasiki	am	kumpla	tonuja
Stephen demon	in this moment	thou	to accomplish	I have

ti	pak al'istan	pak al'a	cep-laiku
come	these heads of livestock	heads of livestock	three for

kasit	esposa	sahut-laiku	hasiki
married-spouses		heath for	in this moment

kumplataja /374/	hasiki	t'apa	kumpañi
I have accomplished	in this moment	all	assembly

tonx-tuñi	kumpltuja	am-ki	mal'ku.
today	I accomplish	thou	demon.

"Stephen-demon, I have come to acquit myself toward thee (by offering thee) these animals on behalf of our three kinds of flocks and on behalf of married people. At this moment I have fulfilled my duty, at this moment, today, with the entire assembly I acquit myself toward thee, demon."

Aside from these insignificant details all the accessories of the festival of the samiri figured in this one but with more abundance. The sheaves of straw were more numerous and more ornate than before, and had some parina (flamingo) eggs placed at their base.

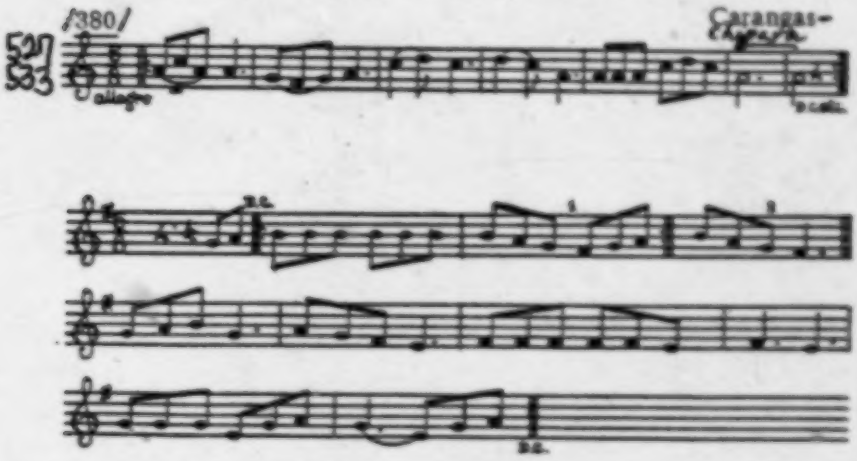
I observed only one new rite: the prayer that the alferez and his wife made successively to the four cardinal points. At the moment when they got up to proceed to this duty, the flutists began to play a melody backed by drumbeats. When they returned to the village in the evening, the alferez and alferezа both had a truss of straw on the back.

2:Métraux--109 E-5 (1930-1931) 1935, 1936 SF24 Uru SF24

Carangas—
Chipaya

/378 cont./

Fig. 38. — A. Čipaya Indian in festival clothes. Notice the crown of flamingo eggs on the head. B. Čipaya Indian equipped to participate in the Carnival dances. On his back a wild duck secured by means of a festive sling and the straw hola perdida.



527 535 974 Thus costumed the Cipaya devoted themselves to the most monotonous of dances, the one which I described in connection with the festival of the samiri (p. 83). The circles broke up from time to time to form processions which, at a running pace, under the white banners of the alferez's, approached the neighboring saya or came to a halt before a hut whose owner offered drinks to [816] everyone. Although the members of each saya prefered to dance on their own territory, visits to neighboring saya were frequent and sometimes led to a mingling which contrasted with the rigorous separation usually in force.

527 In a few huts belonging to some alferez's a table, transformed into an altar, had been set up with the consecrated sheaves of straw and the heads and feet of the animals slaughtered for the festival. Groups went there to offer up libations and to dip into the pile of coca placed before the victims' snouts.

527 The festival proceeded in this fashion for a whole week. [533] At night the young girls would gallop through the village holding each other by the hand, singing their melancholy songs, and a few [973] madmen offered up libations until dawn. The scarcity of alcohol [54] did not allow suppressed passions to be unleashed, and I was not [171] present for any of those brutal orgies in which the Aymara surpass themselves. They scarcely, I believe, had a few quarrels and

2:Métraux--121 E-5 (1930-1931) 1935, 1936 SF24 Uru SF24
Carangas--
Cajaraya

/387 cont./

alcohol, and its blood is offered to the demons. The animal's head is placed on a table where it remains on display for several days. It is surrounded with bunches of flowers, and under the beast's snout a napkin covered with coca leaves and small dishes containing various substances, all invested with magical qualities, is placed. The residents of the hut, who have set up this altar, worship it in summary fashion, the principal manifestations of which are gestures of respect and offerings of coca and alcohol.

Divination.

Like the Aymara the Čipaya Indians practice divination on a large scale. I had one occasion to have the future predicted to me by the most highly reputed specialist of the tribe, Anacleto Mullu. The latter used only a napkin and a certain amount of coca provided by the client as accessories. He began with a short prayer murmured in a low voice, during which he carefully spread out his leaves, patting them with the palm of his hand. He brought his right hand to his mouth /388/ forming a horn and blew gently into it. Then, putting his hand gently back on the leaves, smoothing and caressing them, he repeated the question. After a short invocation he took hold of a handful of leaves which he turned with a quick movement. He separated the significant leaves from the pile to show them to me. From what I could ascertain, a leaf must be turned with its nervures on top, have the petiole behind, and the point of the limb toward the end of the fingers to be considered a good omen. The hand is always kept open, the fingers directed toward the consultant.

To be good the leaf also must not be covered by any other. The leaves which are clearly bad are those which are presented in an inverted position. The worst have their shiny side up and the petiole directed toward the consultant. The precision of the more or less categorical reply of the diviner depends on his general appraisal and on the proportion of good and bad leaves. Folded leaves are taken out and have no significance at all.

2.Mirsos--141 E-9 (1930-1931) 1935.1936 9F34 Ure 9F34
Carnegie—
Chipewyan

/956 cont./ The framework of the latter is actually formed by fagots

of tola (ʔoka, ʔoɣa) solidly bound into cylinders with straw ropes (xuzu) (Pl. VI, 8 /see p. 215/). They are thrust in the holes of which we have just spoken and then tied together (Fig. 1, H /see p. 142/). The number of arches which make up the skeleton of the roof is eight and they are arranged in two groups of four which are superimposed and are fastened at the intersection by solid ligatures. Up to the last moment the framework is held up by props of Cereus wood /157/. /Figure 1 appears here/ /158/ in order to allow the roofers to walk on the arches without risking them fall in.

On this frame is spread a sort of linoleum (pizina) made of straw (ɬ'it) stuck together with mud, the whole forming flexible plates which take the form of the frame. On top of this thin covering, the function of which is to make the roof impermeable, the straw is laid. The roofers receive large bunches of it which are hoisted up with rope. They spread it on the edge of the roof, where they trample it down by foot. These sheaves are then sewn on the faggots by means of a long wooden needle (ʔaɣa) threaded with straw cord (Fig. 1, A) and wielded by two workers, one inside the hut and the other outside. The needle, after having passed through the linoleum, goes around each of the faggots in turn and returns to encompass a new sheaf of straw. The remaining straw is arranged in successive layers, imbricated up to the summit. The adherence of this thatch to the roof and its resistance to the terrific gusts of wind on the altiplano is assured by means of a straw net which is made on the roof itself. The quadrangular or triangular mesh of this net are not exactly knotted but simply made by the intercrossing of a long straw cord which is tightened by traction carried out from below to above in pace with the formation of the net.

The roof is not considered finished until a straw cross surmounts it, which, according to native belief, protects the house from the effects of lightning.

Furnishings. The interior disposition of Čipeya huts is most summary. The only furniture of any importance is the earthen stove

[Text Continues on p.143]

Cayapa
Chipaya

/172 cont./

To protect themselves from the rays of the sun the Cipaya women put /173/ /Figure 5 appears here./ /174/ a folded cloth (cabello) on their head, which makes a sort of Neapolitan headgear for them. If it rains they tie it under the chin as do many European peasant women. The small square of cloth is made of a fabric identical to the muceta; like the latter it is brown or black and bordered on two sides with a fine-striped white strip.

Style of Wearing the Hair

The men cut their hair in a circle all around the head. The women part it in about 60 small plaits (ikuru) separated by a part and joined together in two bunches in the middle of the back (Pl. V, A, C /see p. 214/). They then make two large braids intermingled with woolen strings, the ends of which are tied to each other by small strings. On these strings are hung small bronze medals (icuraba), the original type of which, still kept to this day, is a small statuette representing a woman with hands crossed on the breast (Fig. 14 /see p. 198/).

The women decorate their hair in addition with metal needles (kin, pig-kin, kwalu), the round, flat head of which is perforated with a hole from which a red wool string hangs (Fig. 5, D /see p. 183/). In former times, probably for festivals, they would encircle the forehead with a headband, of which I was able to acquire one last specimen reproduced here (Fig. 5, A). The glass beads which spangle the surface are very old in appearance. The headband and spangles are two ruinous traits which are completely typical of Andean culture.

The women know no other toilette other than the care given their hair. The evening before festivals those who feel the necessity of restoring their plaits abandon themselves to the hands of a few friends who begin by brushing their hair with a brush (kʷaro) made of roots (Fig. 5, E) or pig-bristles (Fig. 5, F), which they soak in

[Text Continues on p. 164]

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Carangas -
Chipaya

/173/

/See captions on next page./

/173 cont./

29
30
302
412
53
214
134

Fig. 5. — Čipaya material culture. Clothing and accessories.

A: Diadem spangled with glass beads.
B: Woman's shirt of white wool (almil'a).
C: Cap of knitted wool (čyl'y).
D: Pin (pāz-kits) which the Čipaya women stick in their hair.
E: Hairbrush (kˣara or čaxraña) of roots.
F: Hairbrush of pig bristle.
G: Man's tunic (ira).

/184 cont./

534

I	II	III	IV	V	VI	Thumb
19.8	22.6	25.7	28.9	31.8	35.0	1.65

The total length of the flute is 39.8 cm.

[177] We do not find the same disposition of the holes on pre-Spanish quena; according to all probability European influence has played a part here.

Flutes with mouthpieces. When the quena is played the current of air is shaped and directed with the lips and must be conducted against the beveled edge of the mouth to break up there and set the column of air in the pipe vibrating. For flutes with mouthpieces (Fig. 11) the formation of the current of air and the direction given to it are produced automatically; it is sufficient to blow and to control the strength of the air current. The air is led through a "vent" (see Figure 10, a /see p. 175/, which shows us a flute with mouthpiece in section) composed of the space between the walls of the pipe and a block of some material inserted in the opening of the flute. The air passes through this channel and strikes against the lower brim (lip).

[824] Čipaya flutes with mouthpieces are made of tola (Baccharis tola). These Indians /185/ make them themselves, taking an old one as a model to give them the distance between the holes. These flutes are made of a branch which is split along its entire length. The two halves are hollowed out and then joined again in such a way that the air cannot escape. Where a perfect joint could not be made, the chinks have been sealed with resin. Since it is difficult with the bushes at the disposal of the Čipaya to come across straight branches, most of the flutes are not straight. Some even have the shape of a segment of a circle, a form which is perhaps intentional (Fig. 8, H /see p. 173/).

Fig. 11. Flute with mouthpiece.

U 796 415

/188 cont./

Some families still have kˣeru, i.e., large wooden mugs (3),

3. Cf. Journal, Vol. XVII, Pl. XVII, D.

beautiful specimens of which have been recovered in Peru. These vessels come out of their hiding-places only at festival time and are used only for libations of chicha. According with the ancient Inca way, they are always presented in pairs in the same way as the drinking cups of alcohol. The kˣeru which I saw in the hands of the Čipaya lack decoration, but the greyish substance which adheres to them is without doubt all that remains of the lacquer which covered the outside surface of it. These pieces are not easy to get, for the Indians consider them of great value and are very attached to them. They assert, perhaps rightly, that they date from the Inca period.

U [082]

The bowl (umaña) in the bottom of which allama with its young has been modeled (4) is destined to hold the chicha which the

4. Cf. Journal, Vol. XVII, Pl. XVII, A.

Indians pour out as a libation in honor of the Pachamama when they request fecundity of the herds from her.

U 778 [824]

No Čipaya hut lacks one or two palm-wood sticks with a rope for suspension (5). These sticks (kamana-para) which are the /189/

M 554 824

5. Cf. Journal, Vol. XVII, Pl. XVI, D.—Among the Quichua of Acomayo, to become mandón or campo it is indispensable to have made "the voyage to the valleys to bring back palms /palmes/ for certain religious ceremonies, such as the promenades after mass on Palm Sunday."

/189 cont./

after mass on Palm Sunday."
It is not impossible that the
palm /palmier/ wood of the
Čipaya corresponds to these "palms"
of the Quichua. Cf. Ordóñez
(Dr. Pastor), "Los Varayocc."
Revista Universitaria. Cuzco,
eighth year. No. 29, September,
1919, p. 43.

guardians of the house are worshiped with libations and fumigations. They are also indispensable accessories for the magicians who always plant them before themselves when they are going to make a prayer or a sacrifice to the demons. One must also not forget among the objects used in worship the baked clay censers which are shaped like a footed cup, and the small cupules for libations.

Division of Labor

	Men	Women	
House-building	+	-	
Straw rope	-	+	
Spinning	+	+	
Weaving	-	+	
Weaving with treadle loom	+	-	
Cooking	-	+	
Livestock care	+	+	(preferably the children)
Cheese	-	+	
Milking of the sheep	-	+	
Shearing of the sheep	+	-	
Rope-making	+	-	

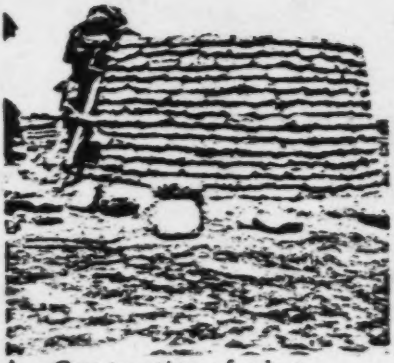
Carangas—
Chipaya
Aymara SF5

/190 cont./

the circular hut is not exclusively peculiar to Chipaya. Near Toledo at Kxulliri an agglomeration exists formed of perfectly round huts which from a distance recall those of the Čipaya although much larger. I stopped for a night in this village to study them, but unfortunately having used up my store of film I could not take photographs of them. These huts were architecturally much more perfected than those of Chipaya. The dome which surmounted them although covered with straw did not rest on a frame of tola but on a cupola made of 22 tiers of clods whose perfection I could admire. The clods that composed it were smaller than in Chipaya and fitted with more care. Given the width, the diameter of the hut, and its height, the erection of this roof must have demanded much time and not a little precision. When going through this village so like that of the Čipaya which I had just left, I though that I had discovered a new Uro tribe. My hypothesis was legitimate because the region which I was traversing had formerly been occupied by numerous ethnic islands of this race. I inquired among the inhabitants for the reasons which made them prefer the circular form of the huts to the rectangular plan adopted everywhere else in Aymara territory. They replied that they were obliged to build houses on this model because of lack of wood. The plain where the village of Kxulliri was standing does, in fact, very much recall in its bareness that of Chipaya. This is, I believe, the reason why the Čipaya also have kept the circular hut of their ancestors. To construct a house on a rectangular plan with a double-pitched roof, wood is necessary. /191/ at the very least laths of Cereus, and this cactus does not grow everywhere. The Aymara who have been fortunate enough to have this plant close to them have been able to change the type of their primitive habitation. The others, less favored by nature or too poor to buy the necessary wood, have remained, like it or not, more conservative. Midway between Oruro and La Paz when traveling by train, one sees some villages on the right where the huts are round and of an identical construction with those of Kxulliri. Besides this Forbes (1)

2:Métraux--215 E-5 (1930-1931) 1935, 1936 SF24 Uru SF24
Carangas—
Chipaya
Aymara SF5

Plate VI



A. Construction of a hut.

B. Construction of a hut: the faggots of tola are arranged in arches.

C. Čipaya hut made entirely of clods.

D. The Aymara church in Iscara (Carangas Province).

3:Vellard--6d D.E-5 (1938-1944) 1949 SF24 Uru SF24

283
412

9. Fisher preparing straw ropes to make a balsa. He is using a stone hammer.

396
824

10. Construction of a balsa: preparation of the three totora cylinders: the heart and the two side parts.

/171 cont./

*539 192 193 1. píni means "many"; with hána it may be rendered by "no more"; učúmi, exclusive personal pronoun /172/ for the first person plural. 2. šalák, probably the Spanish chacra, "cultivated field"; the Uru do not have their own word to designate fields. 4. The ending čay added to a root gives it [136] the verbal form. 6. xui, interrogative particle. 7. suche, small kind of sheatfish from the Titicaca region; it is the [824] Trichomycterus dispar. 8. totora, Scirpus totora, the reeds of Lake Titicaca used by the Uru to build their balsas, cover their houses, and for other uses. 12. ke-, particle of repetition. [101] 14. tòxša, literally "other persons," designates all men other than the Uru; nak' for náka, plural form of pronouns.

*539 396

II. Manufacture of Balsas from Totoras
(Account by Manuel Inta)

(See p. 154 /in the foreign text/)

Free Translation

1. Let us go, as is our custom, to find totoras to make a [283] balsa. 2. We are accustomed to go far to make the straw ropes /necessities/. 3. Three days are needed to dry (the straw ropes). 4. The straw ropes are well dried now. 5. Now all these totoras are well dried. 6. Let us make the balsa. 7. A man cuts the totora. 8. The totora is tied (in bunches). 9. Three have to be made (bunches of totora): the heart (the middle spindle) and the two side spindles of the balsa. 10. We tie (the spindles); now we are going to squeeze them together very tightly, at first it takes two men to squeeze it together. 11. We have the custom of sprinkling (the totora) with water so that it does not dry. 12. Now we are going to tighten; to tighten we are accustomed to use a hook. 13. We beat (the totora) with /173/ a rock (in order to compress it).

/173 cont./

*539 [396] 14. We are going to place a rim of totoras. 15. He attaches the rim of the balsa. 16. He tightens the rim of the balsa. 17. We are going to finish. 18. (The totora) is still a bit loose; we are going to tighten it a bit more. 19. All is finished. 20. Now the balsa is ready. 21. Let us go fishing [501] with the new balsa. 22. We are not going to hoist a sail? 23. We are not accustomed to use a sail; there is too little water. 24. We always use a boat hook manipulated by hand. [226] 25. Here is the stone which is attached to the large net so that the fish can enter. 26. The fish is going to enter (the net); now we are going to lift (the net) up and put it in the balsa.

Remarks

This text is divided into two parts. The first, 1 to 20, describes the making of balsas from totoras. The second is a succinct description of fishing with a net in the swamps of the Desaguadero.

*539 396 [824] To build their balsas the Uru use the Scirpus totora, which used to grow in abundance in the swamps of the Desaguadero and at numerous points on the shores of Lake Titicaca. Two Indians work at the same time on the con- [114] struction of a balsa. First they lay out the bunches of totoras on the ground, from which they make three spindles the length of the balsa, two large side ones and a middle one which is shorter and thinner; this middle cylinder, the "heart of the balsa," used to stabilize the craft, has passed unnoticed by practically all the authors who have concerned themselves [171] with the Uru. Only the fishers on the lagoon of Arapa, to the north of Lake Titicaca, who speak Keĺwa, build balsas, small and rather narrow, formed with two cylinders.

[284] The totora of three cylinders is held in place with the aid of thin straw plaits (2-4), which hold the cylinders evenly between them. These straw ropes are tightened in a progressive and methodical fashion by two /174/ men, working alternately

/180/

Remarks

*539 206 The Uru build dams of totoras in a V-form on the Desaguadero, the point oriented toward the direction of the current. A narrow passage contrived at the point is closed at the time of fishing by means of a large circular net, the kâku, installed on a balsa. Fishers standing on one or several balsas go downstream, beating the water with long poles furnished with a totora ball, in order to frighten the fish which, descending the river course, enter the enclosure and fall into the net [423] placed at the point. Each Uru family has its fishing enclosure, very far away from those of its neighbors (6-7). The distribution of the location of these enclosures as well as the use of the totora fields which are used to make balsas was ruled by Uru customary law.

*539 193 1. ti- ki or simply -ki, a particle to designate the object about which one is speaking: this enclosure here; this river here (5). 6. ɟîla- ɟîla, literally "one," means "one for each"; the repetition of the adverb hâske hâske has the value of a superlative; "far, far, very far"; Aymara and Keĕwa form the superlative in an identical manner: eg.: Kala- Kala, "rock rock," in Aymara: "many rocks."

VII. The Village of the Uru at Iru-Itu
Comments on photographs by Manuel Inta

(See p. 164 /in the foreign text/)

Free Translation

*539 [346] 1. Is this your chapel? 2. It is our chapel. 3. These are our houses. 4. The chapel is seen from behind. 5. The chapel is good that way (seen from the front). 6. The totora [214] is kept upright in a heap. /181/ 7. It is kept in a heap so that it will not rot.

4:Vellard--4 D.E-4, 8 (no date) 1959-1960 SF24 Uru SF24

[16th Century]

/31 cont./

[175] [342] They build their houses on the water on rafts of hay or rushes, which in Peru are called totora and in New Spain tule....

[262] [181] ...They subsist on the fish of the lakes, which is abundant, although not very good.... They dress badly and eat, aside from fish, what they can steal from their neighbors on land; they are crude and coarse and almost bestial people. They [248] were not accustomed to pay tribute or service; and on a general [251] visit that Don Francisco de Toledo made he had them entered in a tax register and settled off the water, and thus they now pay tribute and service and live under the Church and in some order..../Translated from the Spanish./

(Descripción del Reyno del Perú /Description of the Kingdom of Peru/...., 1597. Quoted by Victor M. Maurtua: Juicio de límites entre el Perú y Bolivia /Arbitration of boundaries between Peru and Bolivia/, Barcelona, 1906, I, 295-296.)

/32/ Herrera (Antonio de)

[124] ...in (this lake of Titicaca) there grow large quantities of a reed which they call totora, which is fodder for horses and pigs, and which the Uro Indians use to make houses and boats [101] and for food, and whatever else they need. These Uros are so wild, that when asked who they were, they replied that they were not men, but Uros, as though they were another species of animals..../Translated from the Spanish./

(Historia general de los hechos de los Castellanos en las Islas y /General History of the Deeds of the Castilians in the Islands and/...., Madrid, 1601-1615, III, 5th decade, p. 92.)

Acosta (Father José de)

[33] Into this lake (Titicaca) flow ten voluminous rivers, it has only one outlet and not a very large one, although it is said to be extremely deep; over which it is not possible to build a bridge, owing to the depth and breadth of the water, nor to cross over in a boat, owing to the fierceness of the current, according to what they say.

[16th Century]

/32 cont./

175 according to what they say. It[1] is crossed on a remarkable
[491] contrivance, peculiar to the Indies, a straw bridge placed on
[824] the water itself, which is of such light material that it does not sink, and it is a very safe and easy crossing...there grow large quantities of a type of reed that the Indians call totora, which they use for a thousand things, because it is food for pigs and for horses, and for the people themselves; and with it they make house and fire, and boat and whatever is needed;
[101] so much do the Uros find in their totora. These Uros are so brutish that they themselves do not regard themselves as men. It is said of them that when asked what people they were they replied that they were not men but Uros, as though this were
[361] another class of animals. Entire pueblos of Uros were found living on the lake, on their totora rafts, joined together and fastened to some large rock, and they may fetch themselves off from there and move a whole pueblo to another location; and thus when sought today where they were yesterday, no trace of them is to be found, or of their pueblo..../Translated from the Spanish./

(Historia natural y moral de las Indias /Natural and Moral History of the Indies/, 1590. Book II, Chap. VI.)

Noticia sobre los Indios Uros en un Memorial de la Epoca del Virrey Toledo /Note on the Uro Indians in a Memorial of the Epoch of the Toledo Viceroy/.

175 The Inca, being below Lima, sent one of his captains,
648 called Casiracapa, to those heights with many men, to survey
[511] the land and recount to him what he saw there, /33/ and while traveling through the land he came across some people whose dwellings were like those of animals, and who lived in them like brutish animals, around a large Lake, naked, and eating nothing but roots of plants that grew in the Lake, and some Fish if they caught it, and when the Captain saw these people,
[728] he recounted the fact to the Inca and was sent by him to re-
[949] move them from the Lake and resettle them among the

[1] [ie., Lake Titicaca outlet--Ambrt]

5:La Barre E-5 (1937-1938) 1946
SF24 Uru SF24

DRESS AND ORNAMENTS

Anciently, it is said, the *Uru* went entirely nude, which is quite incredible in view of the bitterly cold winters in this region. The essential male costume is like the pre-Columbian *Chipaya* uncu—a sleeveless, sacklike garment made of an untailored textile, sewed partway up the sides with openings for the arms, and partway across the top with an opening for the neck. This is woven of llama yarn on a simple bar loom staked in the ground. Recently, most *Uru* males have adopted trousers of the *Aymara* style: short, with a slit at the heel, and tailored of native homespun after a Colonial pattern. The slit permits the trousers to be rolled up more easily when a man fishes from a balsa or wades in shallow water. Leather sandals are sometimes worn when traveling, but people usually go barefoot. A knit wool cap, with *Aymara*-style earflaps, is sometimes topped with a crude, *Aymara*-manufactured felt hat. A belt is sometimes worn, and occasionally a thick woolen poncho. Caps woven of bird feathers were known in ancient days.

Uru women wear black llama-wool skirts, girdled at the waist, and untailored bodices pinned at the top over each shoulder with a large-headed copper pin (tupu). When traveling in cold weather, the women wear woven woolen wimples over the head under the hat.

Women part their hair in the middle and wear it in two braids tied behind the back with vicuña-wool filets; only a few still wear the ancient style "Titicaca braids"—countless small braidlets all over the head. Women wash their hair in fermented human urine. *Uru* men wear their hair short in quasi-European fashion or in an all-around tropical bang.

BOATS

The *Uru* are famous balsa builders (pl. 115, *bottom*). Their craft, though actually rafts made of totora reeds, are shaped like boats and are highly navigable even in narrow, shallow swampways. The reeds are cut with knives attached to poles, then, after drying, are stacked in shocks like corn. Nearly every able-bodied *Uru* male has quantities of this material in all stages of preparation for balsas. During spare moments in their houses, they are continually braiding ichu grass into tough ropes to bind the reed bundles. The keel is formed of a long, thin, tubular bundle of reeds; and separately lashed to this keel are two thick, cigar-shaped pontoon-bundles. Each of these pontoons is built up of reeds so arranged as to be very thick in the middle of the boat and to have upturned points at each end. An acute-angled wooden tool with a groove inside one arm is used to tighten the binding. To keep out small waves, gunwales consisting of much thinner bundles of totora are lashed to the upper outside

5:La Barre E-5 (1937-1938) 1946
SF24 Uru SF24

edge of the pontoons. The whole makes a sea-sled type of hull, which will not easily overturn even in the fierce storms of Lake Titicaca.

The balsa is poled along with a stubby trident, the wood for which comes from the yungas east of the Cordillera Real. In the open lake, a trapezoidal reed sail is rigged on two poles stuck deeply into the pontoons and forming an inverted V. The balsa is unable to tack in the wind, however, for it lacks a centerboard. Balsas are dragged onto the land from time to time lest they become waterlogged and rot. Though they may be bought for 10 to 16 Bolivian dollars (bolivianos), they represent much labor.

MANUFACTURES

Uru material culture is simple. Owing to the lack of trees, the giant totora reed (*Scirpus tatora*) is of extraordinary importance, providing material for fishweirs, roof mats (pl. 117, *top, left*), floor and sitting mats, rafters, doors, balsas, sails, and even food for animals and people. Metallurgy is unknown. Pottery making has been abandoned in recent times.

Basketry.—Crudely coiled baskets and twined tortora reed baskets are made.

Textiles.—The *Uru* make twine bird nets, mats of various types, sails, grass rope, and simple baskets (both coiled and twined). Women spin llama wool as incessantly as the men make grass rope, using a wooden spindle. They weave the yarn into cloth on a simple bar loom staked taut on the ground (pl. 116, *top*), rolling up the finished cloth on the end bar. When the end of the warp is approached, they weave from the other end, and finally fill in the last intermediate strip with a needle. Knitting is not pre-Columbian here, but *Uru* women are very skilful in knitting *Aymara*-type caps (gorros), often with amazingly intricate animal figures and other designs. Men's slingshots are very beautifully braided of wool with variolored diamond designs like the markings on snakes. The *Uru* also make thongs of twisted rawhide still retaining the fur, and heavy braided woolen ropes for lashing loads on burden animals.

An extremely interesting textile, apparently unique to the region southeast of Lake Titicaca, is a kind of feather cloth described by David Forbes (1870). The down of lake birds was spun into thread, and then knit into caps and children's socks and gloves. Only a few specimens of these exist in museums.

Weapons.—To make bolas, the *Uru* buy cotton thread from traders and wind this tightly around a cord Y to make a durable bird-hunting weapon. A straw-cord bola perdida, similar to that of Patagonia, is also used.

Metals.—The *Uru* know no metallurgy, although the *Aymara* of Jesús de Machaca, scarcely a day's journey away, are famous for their

5:La Barre E-5 (1937-1938) 1946
SF24 Uru SF24
Chipaya

paper. Llama foetuses are burned in her honor, and whenever an Indian drinks he makes a libation for her. At the end of a feast, the Indians kiss the earth to show their devotion to her.

The malku, next in importance, are represented by whitewashed cones of sod 3 to 4½ feet (1 to 1.50 m.) tall, set on low platforms in isolated and secret spots about 10 miles from the village. Each moiety has its own malku which are worshiped on fixed dates.

The moiety samiri are calcareous stones of irregular shape which are kept in a stone-lined pit in the desert, hidden under a yareta plant. The cult of the malku and that of the samiri follow the same pattern.

Every feast is sponsored by an alférez and his wife, who are the masters of ceremony. The high point is the sacrifice of the three animals on which the *Chipaya* depend for their subsistence: a llama, a sheep, and a pig. The officiating priest is a yatiri—a man who knows the religious prayers and how to prepare the libations to be offered. The blood of the victims is mixed with flours made of various kinds of maize and cast to the four directions. What is left is poured on the cones or samiri stones.

The libations are prepared in small cupulas and in small bottles, which are lined up in a set order. Their formulae are complicated and include a great many magic ingredients (thicha, "severine," that is, mineral powders of various colors, herbs, turquoise beads, gold and silver paper, etc.). The content of each cupula is poured separately with prayers to the Saints, the malku, and Pachamama. Grease balls, with plants stuck in them, and candles are buried for Pachamama. Khoa, an odiferous resinous plant, is burned in special incense burners. Other objects such as grass bundles decorated with ceremonial slings, eggs, wreaths made of sliced fruits, and bread and cheese are displayed by the alférez and carried during the dances. The prayers and the material symbols always express the longing for fertility, for water, and for the multiplication of the herds. The prayers, though directed to pagan deities, are often strongly marked by Christian elements. The day after a feast there is always a communal meal in the village during which the sacrificed animals are consumed and prayers recited.

Carnival is also a very important pagan feast celebrated jointly by the two moieties. The desired fertility is symbolized by huge wreaths of fruits and cheese hung from the church's towers and by the outfit of the dancers, who carry bundles of fresh grass, strings of blown eggs, dead ducks, stuffed vicuñas, and other objects. Dances to the sound of quenas accompany every feast.

Private cults.—When a house is built, a sheep is sacrificed and its blood sprinkled against the walls and roof. On certain occasions, such as the return to the village after a long absence, a sheep is sacri-

Tribute Committee [-1 (per diem) 1969 SP34 Uru SP34

women. The hair is divided into innumerable tiny braids, each decorated with a small flat piece of bone, or a miniature bronze idol exactly like those found at Tiahuanaco. 304 [301]

Chipaya men wear a costume similar to the ajoy used by various Indians in eastern Bolivia. It resembles the shirt worn by the women, but is fuller because it is square. In former times it was the only garment worn by the men; trousers are a recent addition. Colorful decorated ponchos are always slung from the left. The short striped poncho is known as the Chipaya capa. The hair is cut short all the way around and is covered with a cap similar to the chullo of the Aymaras; the distinction lies in the broad ear flaps worn by the Aymaras in contrast to the smaller ones and the earth fiber cloth of the Chipaya caps. 291 [277] [293] [300] [277]

Every Chipaya family owns at least one drum. These instruments are common in the altiplano, but the square shape of the Chipaya drum makes it unique. It is also unusually small, measuring six to eight inches on a side and about two inches in thickness. It is covered with tanned llama skin, stretched over a wooden frame. This instrument is thought to be pre-Columbian, since its unusual construction is no dissimilar to that of the drums introduced by the Spaniards. The Chipayas make two kinds of flutes. The straight Andean flutes are generally made of bamboo, which is brought from other regions and becomes brittle very quickly in the dry climate here. 324 [281] [324] •

[Text Cont'd from p. 24-B]

[p. 21-B]

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Chipaya

They are often reinforced with rawhide bindings, and are handled with great care. The *flauta de pico* is blown through a mouthpiece at the end. To make this kind of flute the Chipayas use the curved branches of the *tola* shrub, which gives these instruments their distinctive shape.

They also use the *ayo*, a round stone that gives out strange sounds through a hole in its center. Played with the other instruments, it produces a heavy music, slow and melancholy. The sound emitted depends on the size of the stone and the way it is struck.

Pottery making is unknown today among the Chipayas and probably has been for many generations, since all their words for pottery are Aymara. The Chipaya women bring water from the Lauca River in very large jars, carrying them on their shoulders with the help of an ingeniously knotted cord of llama wool, exactly in the manner shown on ancient Chinese vases. From time immemorial the Chipayas have made beautiful coiled baskets of straw.

Chipaya religion, a blend of pagan and Catholic features, is basically the same as that of the Aymaras, although it probably preserves the pagan aspects in purer form. Pachamama, the Earth Mother, is the favorite goddess, and is often confused with the Virgin Mary. They also worship St. Philip, St. Jerome, and St. Ann; a host of spirits called *machos*; the Lauca River; the nearby moun-

[P 22-8]

8/Pak T-5 (ca.1954) 1955

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rily to the end of her recital. She stopped quite suddenly and demanded some coca, informing us that the next meeting was scheduled to take place the following morning, when "she hoped to tell us a great many interesting facts".

By this time the light was going, so we decided that it would be wise to settle the question of our night's quarters. The mayor gallantly offered me his house; fortunately on our way to the meeting we had passed by, and I had seen all that was necessary to confirm me in my decision to sleep in the car. Protesting that alone I could not take up the whole house, I nobly waved my rights in favour of worthier and braver guests. Kenneth, Rojas and Roca, not having sleeping-bags, decided that bugs were preferable to frostbite, so fell in with the mayor's offer. It was decided we would use his house as our dining-room; I therefore made my way thither with the supplies.

Night was falling, a cold wind blowing in little sharp gusts across the great empty *pampa*, the hut was lit with a lantern that someone had brought. The five men were sitting huddled in *ponchos* or greatcoats on the bed, which was made of a bamboo frame covered with rushes and llama skins. The atmosphere was constrained, as we spread the food on the rough table. I said: "Now we shall go and heat this beef over a fire". They suddenly burst out simultaneously in English, French and Spanish: "There is no fire in the village and there is nothing to make one from". The only combustible in use on the Altiplano is dried llama-dung or *yareta* *). This latter is too expensive for the poverty-stricken Uru, and they have not enough llamas, if any, to provide a sufficient provision of dung.

Sadly and silently we ate our icy food. A bottle of rum brought a certain comfort. As the village had retired for the night at sundown, we decided to RETIRE TO OUR RESPECTIVE QUARTERS.

*) Yareta, a fungus which grows just under the turfs and is common to all this part of the Altiplano. It is dug up and dried and forms an excellent combustible. It generally replaces coal.

[D-310-A]

B/Peru T-6 (pa.1954) 1956
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were some withered Palm-Sunday decorations made from the rushes which border the river. They were plaited and twisted and fringed and hung on rusty nails. The door stood partially open. A low adobe wall surrounded the building. There were no tombs in evidence. A family of donkeys had taken up their residence there. We gave them some biscuit and apple, and they followed us down the stony path to where the village was assembled. The cameras were ticking, and our chauffeur Carlos had been pressured to supplement with a wooden clapper. Our star was continuing her role with renewed enthusiasm; leaning against the wall were two boys 11 or 12 years old, one had beautiful smooth regular features. I photographed him, but he never moved, nor seemed conscious of our presence. We left him standing motionless and followed the younger one down to the river where a man was plaiting rushes, preparatory to making a balsa.

Some fifteen years ago the whole region suffered from a severe drought. The watertevel of the lake descended from twelve to fifteen feet and many of the marshes dried out, and the reeds, the totora, withered and disappeared. These totora play as important a part among the Uru as the lliata among the Aymara or Quechua on the Altiplano. While the stems are used for making balsas, mats and ropes, the roots or *kaware* are the staple diet of the Uru, who also use it to brew a kind of beer, allowing the tubercles to ferment.

Fortunately in these last few years the climatic conditions have once more returned to normal, and with the rise of the lake the totora have once more increased. These reeds, with their tall pointed leaves, have the gracefulness of a gondola. They are composed of three cylinders, two forming the sides and one the centre. The rushes are plaited into long braids, the end being held between the man's toes. These braids are then plaited together and together again, and all these ropes are assembled, entwined and laced together. Two men work simultaneously,

9:La Barre E-4,5 (1938) 1941
SF24 Uru SF24

stone mine, or mud-and-stone conical huts. I observed no huts at Ancoaqui, though they occur in Aymara villages a day's journey hence.

Agriculture is unimportant among the Uru, although they cultivate *kotawa* (or "quinoa," Uru *kula*, a millet-like grain) from which they make a toasted ground powder they call *pito*. It is pleasant tasting and is very concentrated and nourishing. They also cultivate a small amount of "papas amargas" or small, bitter potatoes from which they make *tuba* (Uru *suni*). The succulent white roots of the *totora* reed (*cala*, *kauri*, or *kaima*) are commonly eaten raw by the Uru. These vegetable products they augment in their trading of fish to the Aymara.

Kotawa is ground on a stone sloping outward from the woman's lap with a flat stone bar, whence the ground grain collects in a cloth at the far, lower end. The Uru make a beer they call *likta* or *likti*, or *cawinchamia* according to Paloveciuo. Pomansky (page 162) says they sometimes make chicha of masticated maize also; *likti* is made from a plant called *kiawi* or *kiari*, which he supposes is aquatic. This same author considers the Uru somewhat more abstemious of alcohol than the Aymara but this is probably less a result of inclination than extreme poverty. This Bolivian student notes also as a food of the Uru "camaroncitos [shrimp] transparentes" (Uru *koykoya*), Amphipods of the group *Hyalella pulida*, *H. robusta*, etc. from two to ten millimeters long, which live in the *totora* roots. Toasted, these are a rich, nutritious food in times of scarcity, as well as an "estimulante sexual." The Uru chew *coca*, of course, as do all Andean natives, trading their fish for it with the "chola" or halfbreed tradesmen who bring the narcotic leaf from the *yungas* or deep semi-tropical valleys of the Departamentos of La Paz and Cochabamba.

Fishing is the basis of Uru economy, however, as it appears to have been throughout the period of European knowledge of them. Fishing by moonlight I was told is preferred as the best time. Fish fences, *kowla*, of *totora* bundles stuck in the soft mud of the river bottom were observed several times in the Desaguadero. They are of the same type that is used in the swampy shallows of southern Lake Titicaca. Paloveciuo thus describes their construction:

> Each of these [bundles] is made of five or six reeds placed in the same direction and attached by the upper thinner part. They carry these bundles in their balsas to the place which appears to them best for fishing and there build their weir. To drive the bundles of totora into the mud they use the *gaff* (*almea*) with which they push their boats. [This is a stout pole with a stubby tripod at the base, so that it will catch on roots and water plants and not sink into the soft mud when the boat is poled along (W. Loh.)] The bundle is placed against the *gaff*, the end of which rests on the lip-

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wooden hafts and a small grooved, ovoid stone for the handgrip.[8] They have no firearms, nor have they ever possessed them apparently. The bow and arrow is likewise lacking; spears are used only in obtaining fish.

An interesting group-hunt at determined periods employs both men and sometimes women. They stretch in selected sites extensive nets, sometimes hundreds of meters long, for birds whose flight is near the surface of the water; the nets are extended below the surface also, to prevent the escape of diving birds. They anchor the nets to faggots or clumps of *totora* set in slightly curved lines. Then hunters in their *balsas* make much noise and frighten the birds into the almost invisible nets, where they can despatch them with clubs (*yoḍewa*), and kill with their *balsa* those which attempt to escape. Uru also eat the eggs (*liñi*) of aquatic birds. The flesh of the birds is cut into strips, hung in the sun, and dried into a kind of *charqui* ("jerky," from the Aymará *ṭarki*).

The Uru do little hunting of land animals. Vicuñas (*Auchenia vicuña; ruhaja*, a word obviously related to Aymará *kaja*, llama) are extremely scarce or absent, as are also guanacos. It is said, however, that in winters of very extreme cold[9] small groups of vicuñas may stray down into the Desaguadero region. The head male of the herd is lanced, and the others of the herd, immobilized by the cold, are speedily killed. The small rodents of the pampas, like the viscacha (*ajiłoi*), apparently are not hunted by the Uru. Most of the birds they kill, like a good proportion of the fish they catch, they take to the villages to trade for other food and necessary articles, since these are their sole source of revenue, beyond their *balsa*-making.

Material Culture. The stalks of the giant reed *totora* (a *Cyperaceous* plant, *Scirpus totora*) are surely the most important substance in Uru material culture: of them they make fish-weirs, supports for bird-nests, roof-mats, floor- and sitting-mats, rafters, doors, *balsa*-boats and their sails; and the few cattle they have browse upon the roots of the *totora* as well. Unless *balsas* are frequently removed from the water and thoroughly dried, they last scarcely longer than a year or two before rotting. The Uru *balsa*-builders are famous and supply many of their Aymara neighbors with them in the southwestern region of Lake Titicaca. The reeds must first be cut with

[8] An Uru lance from the Desaguadero is now in the possession of Dr Frank G. Speck, in his private collection at the University of Pennsylvania.

[9] The Aymara have a phrase to designate extreme cold or "bone-monkey" weather: *q'ala* ("stone"), *hakaya* ("to split"), *wawi* (vicuña), *q'awaya* ("snakes cry"), i.e. weather cold enough to split stones and make the fluffy-coated vicuña scream. The Aymara schoolboys in La Paz—according to my "chicha" interpreter, the late Moisés Alvarez, who was one of them—have made a very effective football ("barbed") yell of this familiar phrase: *q'ala hakaya wawi q'awaya, ara ara!*

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396 knives on the ends of poles, then stacked in shocks like corn, after they have been dried spread out in the sun. Nearly all able-bodied Uru males have quantities of these materials in various stages toward the manufacture of the complete boats. In their houses, even, in spare moments, men are continually braiding *ičw*-grass into tough ropes to bind the boats together.

Though shaped like a boat, the *balsa* is of course actually a raft. A handful of reeds is bound together and repeatedly thickened with more reeds as the middle of the cigar-shaped element is reached, then tapered off again into a point. The only tool used in the manufacture of this is a wooden hook [413] (*kaχlu*) with a handle at an acute angle to it, used to tighten the lashing of grass rope. A more tubular and thinner sheaf of reeds forms the keel of the *balsa*, and two of the fat cigar-shaped bundles are separately lashed to it, forming a sort of sea-sled type of hull, which cannot be overturned in a storm; the thinner ends of these cigar-shaped bundles are slightly raised fore and aft of the boat. To form gunwales, a still thinner and tubular sheaf of reeds is lashed (during its own round-and-round binding with braided grass rope) through the original lashing of the hull-elements. One of these gunwales (*pinča*) is placed on each side of the top of the hull-elements to prevent splashing of water onto the occupants of the boat as it is poled along. The Uru *balsa* thus differs from the Aymára[36] type in that its two [191] large basic elements are lashed to a central "keel" and not to each other (though the bulwark lacings are similarly looped through the lacings of the two hull-elements); it has therefore five instead of four elements. The Uru also rig their *totora*-mat sails with a slight difference from the Aymára. [502] Sails, however, can only be used on the Lake and on the open river "before the wind" since the boat has no center-board and cannot tack. In the narrow swampways a punt pole or gaff (*teksi*) with a stubby trident at its end is [824] used to push the boat along. The wood for these comes from the *yungas* of the Cordillera Real's eastern, tropical slopes. (See Posnansky, Fig. 83.) A complete *balsa* cost in 1937 from ten to sixteen *bolivianos*, then worth about 5¢.

285 Of Uru textiles we have already noted twined single-element *totora balsa*-sails, twined many-element mattress-mats of reed, fish- and bird-nets (which they themselves make of cord obtained in Guaqui from La Paz), and 283 single-element twined roof mats of *totora*. Métraux has an excellent description (page 86) of the preparation by soaking, pounding, and rolling of the wiry grasses of the region (*Stipa ichu*, *Festucha orthophylla*, and *F. dis-*

[113] [36] Lorenzo R. Parodi, *Las balsas usadas por los Aymaras en el lago Titicaca* (Physis, Revista de la Sociedad argentina de ciencias naturales, Vol. 11, Buenos Aires, 1932), pp. 145-149. Métraux' description (JSAP 27: 84) is of the Aymára type.

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FIG. 3. Making an Uru balsa, Arcoaqui, Bolivia.